

REMARKS

The final Office Action dated 5 May 2004, the Interview Summary dated 10 June 2004, and the Advisory Action dated 1 September 2004 have been received and their contents carefully studied. Reconsideration of the rejections of the claims is respectfully requested in view of the following remarks.

Claims 1-21 are pending. All of the claims stand rejected. The independent claims are claims 1 and 13. The Advisory Action indicates that the *Yasue* reference has been overcome. All claims are now rejected as obvious under 35 U.S.C. 103(a) from *Takahashi* in view of *Yamakage* (US Patent 5,872,597).

The independent claims 1 and 13 are now amended to include more details about virtual buffer verifier (VBV) values. This aspect of the invention is discussed in the passage beginning at page 9, line 4 of the priority document (see also page 8, lines 27-32 of the present application as originally filed). This amendment is also supported at least by claims 12 and 21 as originally filed.

The final Office Action acknowledged (page five, first sentence) that *Yamakage* fails to disclose any details about a bitstream analyzer. According to the final Office Action, *Yamakage* teaches the concept of a bitstream analyzer at feature 30. Applicant respectfully submits that when the feature 30 of *Yamakage* is compared to the bitstream analyzer of the present invention, there are many differences, and these two things are therefore not comparable. The characteristics of the bitstream analyzer of the present invention are described in the description of Fig. 5 beginning at page 9, line 4 of the enclosed Finnish priority document (emphasis added):

“A bit stream analyzer block 502 is coupled to the input 501. It has four data outputs which are known as the ‘untouched’ output, ‘DCT coefficients’ output, ‘quantization matrices’ output and the ‘virtual buffer verifier’ output. Additionally, the bit stream analyzer block 502 has a control output. . . . The bit stream analyzer block 502 performs a demultiplexing function where the VBV values and other virtual buffer related information are directed to the VBV value modifier block 510, the weighting (quantization) matrices are directed to the element-wise matrix multiplier block 509, the DCT coefficient matrices are directed to the variable length decoder 505 and the rest of the bitstream is directed

through the 'untouched' output to the corresponding input of the multiplexer block 503."

Yamakage discloses neither an "untouched" output nor a "virtual buffer verifier" output. Therefore, it will not be possible for the feature 30 of *Yamakage* to perform the functions described in the present claims, and the feature 30 of *Yamakage* is fundamentally different from the bit stream analyzer of the present claimed invention. New claims 22 and 23 are also now added, in order to claim the idea of untouched output.

Applicant notes that the *Yamakage* reference had previously been cited in the non-final Office Action against only the dependent claims, but is cited in the final Office Action against the independent claims also. *Yamakage* was provided by Applicant in an Information Disclosure Statement (IDS) filed August 28, 2000 after Applicant received a Finnish Search Report indicating that *Yamakage* was an A-reference (i.e. technological background only).

Applicant notes that the primary embodiments in *Takahashi* (the first and second embodiments) suggest data reduction to be achieved at the level of the actual video image information. *Takahashi* has probably adopted this idea of handling the whole information that he has never come across the idea of using a bitstream analyser to separate the different kinds of data from each other. In the applicant's invention there is a bitstream analyser (block 502 in FIG. 5) that separates the original video stream into as many as four different component streams, which are the untouched data component stream, the DCT coefficients component stream, the weighing matrices component stream and the VBV component stream. Performing the compression-based operations in separate processing branches for these separate types for data is much more economical than driving the whole encoded video stream through a single processing block where some corners of it are sliced, which efficiently is *Takahashi's* approach. The amended claims now emphasize this feature.

As the Office Action acknowledges, *Takahashi* does not disclose using a bitstream analyser. The Office Action has cited *Yamakage* to show anticipation for this feature, but the applicant must respectfully point out that *Yamakage* is not related to

reducing the volume or rate of encoded video bitstreams, above and beyond the fact already described above that *Yamakage's* element 30 is fundamentally different from the presently claimed bitstream analyzer. Thus, there is a serious motivation problem here, and it is unclear why a person skilled in the art would turn to *Yamakage* in order to find a way to reduce bitstream volume or rate. The final Office Action stated (at page 6, second paragraph) that column 1 of *Yamakage* discloses reducing the volume or rate of encoded video bitstreams, but the Applicant has carefully examined column 1 of *Yamakage* and can find no such statement. The mere fact that *Yamakage* teaches an arrangement for processing MPEG video bitstreams does not in any way suggest that *Yamakage* addresses reducing encoded bitstream rate or volume. Even if *Yamakage* did disclose such a thing, there is no suggestion that *Yamakage* would utilize a bitstream analyzer comparable to the bitstream analyzer that is presently claimed.

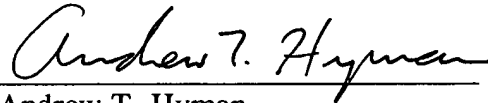
CONCLUSION

Applicants respectfully submit that the claims of the present application define patentable subject matter and are patentably distinguishable over the cited references for the reasons explained. The rejections of the final Official Action of 5 May 2004 having been shown to be inapplicable, retraction thereof is requested, and early passage of all the pending claims to issue is earnestly solicited.

Applicant would appreciate if the Examiner would please contact Applicant's attorney by telephone, if that might help to speedily dispose of any unresolved issues pertaining to the present application.

Respectfully submitted,

Dated: Sept. 20, 2004



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